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--4. (Amended) A vaccine according to claim 1, wherein the immunogenic component is substantially free from outer core lipopolysaccharide.--

--5. (Amended) A vaccine according to claim 1, wherein the species of the pathogenic *Neisseria* is *Neisseria meningitidis*.--

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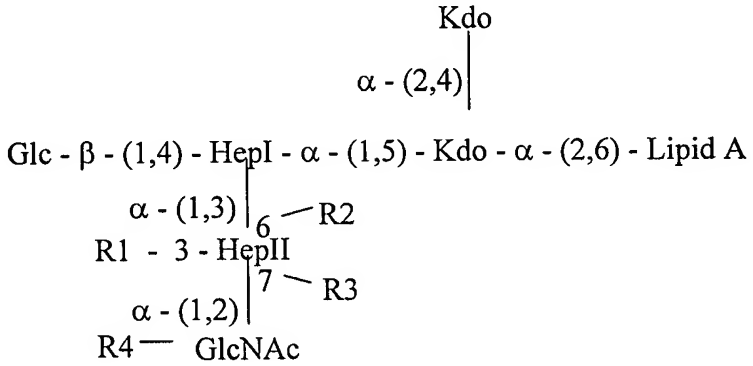
--9. (Amended) A vaccine according to claim 1, wherein the immunogenic component comprises of or consists of an epitope which is a part or all of the inner core structure of a *Neisseria* LPS, is derived from this inner core, is a synthetic version of the inner core, or is a functional equivalent thereof.--

--10. (Amended) A vaccine according to claim 1, wherein the immunogenic component is an epitope on the LPS inner core characterized by the presence of a phosphoethanolamine moiety linked to the 3-position at HepII of the inner core, or is a functional equivalent thereof.--

--11. (Amended) A vaccine according to claim 1, wherein the immunogenic component is an epitope on the LPS inner core which comprises a glucose residue at HepI.--

--12. (Amended) A vaccine according to claim 1, wherein the immunogenic component is an epitope on the LPS inner core which comprises an N-acetyl glucosamine at HepII of the inner core LPS.--

--13. (Amended) A vaccine according to claim 1, wherein the inner core LPS consists of an inner core oligosaccharide attached to lipid A, with the general formula as shown:



where R1 is a substituent at the 3-position of HepII, and is hydrogen or Glc-α-(1, or phosphoethanolamine; R2 is a substituent at the 6-position of HepII, and is hydrogen or

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phosphoethanolamine; R3 is a substituent at the 7-position of HepII, and is hydrogen or phosphoethanolamine, and R4 is acetyl or hydrogen at the 3-position, 4-position or 6-position of the GlcNAc residue, or any combination thereof; and where Glc is D-glucopyranose; Kdo is 3-deoxy-D-*manno*-2-octulosonic acid; Hep is L-*glycero*-D-*manno*-heptose, and GlcNAc is 2-acetamido-2-deoxy-D-glucopyranose.--

--14. (Amended) A vaccine according to claim 1, wherein the immunogenic component is reactive with the B5 antibody produced by the hybridoma deposited under accession number IDAC 260900-1.--

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--17. (Amended) A vaccine according to claim 15, wherein the said few immunogenic components elicit functional antibodies in at least 85% of the strains within the species of the pathogenic *Neisseria*.--

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--19. (Amended) A vaccine according to claim 15, wherein an immunogenic component is reactive with the A4 antibody produced by the hybridoma deposited under accession number IDAC 260900-2.--

--20. (Amended) A vaccine according to claim 1, wherein the immunogenic element of the vaccine is an epitope accessible on the bacterium in the presence of bacterial capsule.--

--21. (Amended) A vaccine according to claim 1, comprising one or more immunogen components which are capable of stimulating antibodies which are opsonic.--

--22. (Amended) A vaccine according to claim 1 for the treatment of *Neisseria meningitidis*.--

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--24. (Amended) A vaccine according to claim 1 for the prevention of meningitis, septicaemia or pneumonia or other manifestation of systemic or local disease occasioned by *Neisseria meningitidis*.--

--25. (Amended) A vaccine according to claim 1 for the treatment of urethritis, salpingitis, cervicitis, proctitis, pharyngitis, pelvic inflammatory disease or other manifestation of systemic or local disease occasioned by *Neisseria gonorrhoeae*.--

--26. (Amended) A vaccine according to claim 1 which is a conjugated vaccine.--

--27. (Amended) A vaccine according to claim 1, which is derived from a commensal *Neisseria*.--

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--35. (Amended) A pharmaceutical preparation comprising an antibody according to claim 29 in combination with a pharmaceutically acceptable carrier.--

--36. (Amended) A method for the treatment of *Neisseria* infection, the method comprising administering to a subject in need of such treatment an effective amount of a vaccine according to claim 1.--

--37. (Amended) A method for the treatment of *Neisseria* infection, the method comprising administering to a subject in need of such treatment an effective amount of an antibody according to claim 28.--

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--41. (Amended) Use of an antibody according to claim 29 in the preparation of a medicament for the treatment of *Neisseria* infection.--

In the abstract:

Please include the following abstract.

A12

--The invention relates to a vaccine for the treatment of disease caused by Neisseria, the vaccine including one or more immunogenic components for Neisseria serogroups, as well as antibodies to the immunogenic components and methods of preventing and treating Neisseria infections. The immunogens are based on elements of the inner core lipopolysaccharide.--